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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,711	12/30/1999	DAVID O. MCGOVERAN		8198

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GEORGE S COLE
495 SEAPORT COURT SUITE 101
REDWOOD CITY, CA 94063

EXAMINER

BOYCE, ANDRE D

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/476,711

Applicant(s)

MCGOVERAN, DAVID O.

Examiner

Andre Boyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Non-final office action is in response to Applicant's amendment filed December 8, 2003. Claims 16-30 have been amended. Claims 1-30 are pending, since Applicant has not correctly canceled claims 1-15 (which remain rejected as seen in office action filed October 16, 2002). Withdrawing the claims is not appropriate. The claims should be **canceled**.

2. The previously pending objection to the claims for numbering has been withdrawn.

The previously pending rejections to claims 17, 21, 22, and 26-29 under 35 USC § 112, second paragraph have been withdrawn.

3. Applicant's arguments with respect to claims 16-30, under the prior art, have been considered but are moot in view of the new ground(s) of rejection. All other rejections that have been maintained include responses to Applicant's arguments.

New Matter Added to the Specification

4. The amendment (and substitute specification) filed March 14, 2003 (previously filed July 26, 2002) is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. With reference to the newly

submitted specification filed March 14, 2003, the added material which is not supported by the original disclosure is as follows: page 4, lines 3-8, page 4, lines 22-26, page 6, lines 1-28, page 7, lines 1-25, page 13, lines 19-22, page 17, lines 15-21, page 18, lines 16-28, page 19, lines 1-28, page 20 lines 1-14, page 29, line 28, page 30, lines 1-5, page 31, lines 22-28, and page 32, lines 1-10.

This rejection is maintained and the Examiner re-submits that in an attempt to clarify the concepts expressed in the original specification, Applicant has indeed added new matter. The Applicant asserts that the addition of the new matter is an attempt to provide additional background information. The Examiner disagrees and submits that the citations listed above all constitute new matter. As an example, page 13, lines 19-22 of Applicant's specification reads "[f]or each sub-process that transforms one or more inputs into one or more outputs, a capacity for dynamic use, alteration, non-use, or even removal is instantiated, so that the entire business process itself becomes a dynamic optimization of a set of transformational processes." This is clearly new matter, since it was neither expressly nor inherently disclosed. Applicant's continued assertion that the new text is "provid[ing] additional background information" or that it was "inherent" based upon the original specification is not persuasive.

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

6. Claims 16-30 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 16 recites "...dynamically managing a process through an emergent and inductive approach that anticipates possible conditions and desired actions...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter. The Examiner submits that "dynamically managing a process" is not the same as "managing a dynamic process" (the claim language originally used by Applicant). Further, Applicant's assertion that the limitation was necessarily disclosed already as a function of the invention is not persuasive, nor supportable by the original specification. Moreover, Applicant's citations in the response do not match the original or amended specification reviewed by the Examiner. Claims 17-23 and 30 depend either directly or indirectly from claim 16, thereby containing the same new matter therein.

Claim 24 recites "...dynamically managing a process ...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter. The Examiner submits that "dynamically managing a process" is not the same as "managing a dynamic

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process" (the claim language originally used by Applicant). Claims 25 and 26 depend either directly or indirectly from claim 24, thereby containing the same new matter therein.

Claim 27 recites "...a dynamically adaptable device ...", which was added via the Applicant's amendment filed March 14, 2003 and was not described in the original specification, and is considered to be new matter.

Claim 28, which was added via Applicant's amendment filed March 14, 2003 recites "A method for inducing a business process from a set of defined conditions...". This portion of the claim was not described in the original specification and is considered to be new matter.

Claims 29-30 were added via Applicant's amendment filed March 14, 2003 and the limitations therein were not described in the original specification and are considered to be new matter. Here, it is clear that the claims constitute new matter by the simple fact that these claims mirror the new matter added in the specification (amendment filed March 14, 2003) on page 31, lines 22-28, and page 32, lines 1-10. Applicant's continued assertion that the limitations were suggested or inherent in the original specification is not persuasive.

7. Claims 19 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 19 and 23 are rendered vague and indefinite. If Applicant intends for the claims to be apparatus claims (i.e., computer program embodied on a general-purpose computer), then the claims need to be written as independent apparatus claims.

Claim 26 is rendered vague and indefinite. Claim 26 is an improper dependent claim since it "produc[es] a distinct new method." Further, "the steps used" lacks antecedent basis.

Claim Rejections - 35 USC § 101

8. Claims 16-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

First, for a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts. In the present case the independent claims 16, 24, and 28 only recites an abstract

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idea. The recited steps of declaring an objective, stating corresponding rules, testing each rule, *actuating a rule*, delegating, and internalizing feedback does not involve, use, or advance the technological arts, since the steps could be performed using pencil and paper. A decision to set a new goal (one of Applicant's examples of actuating a rule, seen in Applicant's amendment filed December 8, 2003) is clearly a mental exercise. Further, Applicant concedes in response filed March 14, 2003 that this "reasoning approach" does not require computer implementation.

Additionally, for a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In the present case, the claimed invention is merely a "reasoning paradigm", producing *no concrete and tangible result*. The steps of declaring, stating, testing, actuating, delegating, and internalizing, even when reduced to a form of logic do not produce a tangible result. It merely defines a theoretical approach/roadmap (i.e., paradigm) for a business to follow, hence no *tangible* result. Further, the result is not concrete, because the result is not assured or reproducible.

Claim Rejections - 35 USC § 103

9. Claims 16-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (The Information System Consultant's Handbook, December 1998), in view of McDermid (Software Engineer's Reference Book, 1991).

As per claim 16, Davis et al discloses a method for dynamically managing a process through an emergent and inductive approach that anticipates possible

conditions and desired actions (creating an expert system 7.4.2, page 50), comprising declaring an objective of the process as a set of measurable goals and constraints, stating for each objective at least one corresponding and applicable set of rules (identification and conceptualization phase, including identifying the problem resources and goals and diagramming the concepts and relations, figure 7.2), testing each rule against conditions both internal and external, as they exist in the real world, and actuating a rule when its condition is met (testing/evaluation phase of the results and prototype feasibility, figure 7.2). Davis et al does not explicitly disclose delegating the objective to at least one specific actor, wherein each said specific actor inherits from all superior actors conditions as constraints and actions as goals, and passes upwards all actions as instantiations of conditions, and all information necessary for altering any objective when the objective does not conform to the real world. McDermid discloses breaking the task down into sub-tasks and individual actions, so the user can clearly understand what needs to be done (13.6 Qualitative changes in skill). Further, learning is facilitated by consistency and upward transfer of tasks among superior and subordinate actors (page 13/11). Both Davis et al and McDermid are concerned with information systems, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include delegating the objective to at least one specific actor in Davis et al, as seen in McDermid, as an effective and employee specific distribution of objectives.

As per claims 17 and 21, Davis et al does not disclose the steps done in a declarative method suitable for reduction to a form of formal logic. However, McDermid discloses declarative knowledge consisting of facts and propositions, thereby suitable for reduction to logic (page 13/11). Both Davis et al and McDermid are concerned with information systems, therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the steps done in a declarative method suitable for reduction to a form of formal logic in Davis et al, as seen in McDermid for use in the expert system of Davis et al (figure 7.2), thereby improving implementation.

Claims 18-19 are rejected based upon the rejection of claim 16, since they are the method steps instantiated in a computer program and the general-purpose computer programmed to implement the method, respectively, corresponding to claim 16.

As per claims 20 and 25, Davis et al discloses internalizing feedback for both performance and process and incorporating into the method, steps for creating, differentiating, modifying, and deleting any objective, goal, constraint, set of rules or rule (refinement, reformatization, and redesign figure 7.2).

Claims 22-23 are rejected based upon the rejection of claim 20, since they are the method steps instantiated in a computer program and the general-purpose computer programmed to implement the method, respectively, corresponding to claim 20.

Claim 24 is rejected based upon the rejections of claims 16 and 20, since it contains the same limitations therein.

Claim 27 is rejected based upon the rejection of claim 24, since it is the device claim corresponding to the method claim.

As per claim 26, Davis et al disclose producing a new method lacking any logical contradiction (reformatization, including reformatizing any key concepts, sub-problems, and information flow, 7.4.2.3, page 51).

Claim 28 is rejected based upon the rejection of claim 24, since it contains the same limitations therein. Further, Davis et al discloses the method used in a business process (medical field, 7.2, page 48).

As per claim 29, Davis et al discloses creating and maintaining a dynamic and self-referential representation of the induced business process within the model, and changing the dynamic and the self-referential representation as and in accordance with each change in the set of defined conditions, constraints, rules, and elements comprising the model (i.e., inference engine that reaches a conclusion based upon available information and reasoning, 7.4.1, page 49).

As per claim 30, Davis et al disclose including at least one anticipatory defined condition, constraint, rule, or element (reconceptualization including redefining the system's key concepts, and objectives, 7.4.2.2, page 51).

Response to Arguments


10. With respect to the objections to new matter in the specification under 35 USC § 132 and rejections under 35 USC § 112 and § 101, the Examiner has incorporated responses to Applicant's arguments, after the associated rejection for purposes of clarity and efficiency. Further, the Examiner submits Davis et al (The Information System Consultant's Handbook, December 1998), in view of McDermid (Software Engineer's Reference Book, 1991) as disclosing Applicant's invention.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Tucker (The Computer Science and Engineering Handbook, 1997) discloses database performance measurement.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (703) 305-1867. The examiner can normally be reached on 9:30-6pm M-F.
- If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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